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09/936,242	02/01/2002	Andrew Richard Wainwright	294-107 PCT/US	9497
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			EXAMINER	
			BECKER, DREW E	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/936,242

Applicant(s)

WAINWRIGHT ET AL.

Examiner

Drew E. Becker

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The declaration of Dr. Buwalda under 37 CFR 1.132 filed 4/23/07 is insufficient to overcome the rejection of claims 1-18 based upon Martines-Serna Villagran et al in view of Tallberg et al, Stahl, or Buwalda as set forth in the last Office action because: it does not take into account the teachings of the primary reference (Martines-Serna Villagran et al) with regard to using potato starch to make flakes and granules. Furthermore, the Buwalda reference teaches that snack foods made from potato starch with 100% amylopectin possessed increased expansion properties (page 13, column 3, 1st paragraph).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites "amylopectin starch having an amylopectin content of at least 95 wt%, and wherein the amylose content of the amylopectin starch is less than 5 wt%". This concept does not appear to be disclosed in

Art Unit: 1761

the application. The specification only appears to teach the total amount of starch having 95% amylopectin content. Also, claim 1 recites an expansion which is "at least 7% more" than a conventional snack food. However, the application only appears to teach an expansion of just 7% (page 23, line 19). It is silent as to higher values.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites "amylopectin starch having an amylopectin content of at least 95 wt%, and wherein the amylase content of the amylopectin starch is less than 5 wt%". It is not clear how amylopectin starch can also be amylose starch.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martines-Serna Villagran et al in view of Tallberg et al [Pat. No. 5,824,798] and Buwalda [Sheer Stability].

Art Unit: 1761

Martines-Serna Villagran et al teaches a snack product comprising potato flakes (column 10, lines 15-28), normal potato flakes comprising about 73-81% amylopectin (column 6, line 50), the preferred potato flakes having a decreased amylose content produced by blanching and pre-conditioning (column 7, line 31), the potato flakes comprising 78% of the snack product (column 21, line 25), cereal flours and normal potato starches (column 10, lines 40-63), additives such as emulsifiers (column 11, line 65), the snack products being fried, baked, or extruded (column 10, lines 15-28), Saturna variety of potatoes (column 4, line 28), less than 5% reducing sugars (column 11, line 50), and oil (column 17, line 30). Martines-Serna Villagran et al do not recite potato starch with an amylopectin content of at least 95% and at least 7% greater expansion (claim 1) or at least 85% amylopectin (claim 18). Applicant defined high amylopectin potato flakes and granules on page 4 of the specification as being potato flakes and granules prepared from potatoes of which the starch has an amylopectin content of 85% or more. Tallberg et al teaches a potato comprising starch with an amylopectin content of 100% (claim 1; column 1, lines 37-44). Buwalda teach a potato with 100% amylopectin starch (Table 1) and improved expansion properties in snack foods (page 13, column 3, paragraph 1). It would have been obvious to one of ordinary skill in the art to incorporate the high amylopectin potato of Tallberg et al and Buwalda into the invention of Martines-Serna Villagran et al since all are directed to food products, since Martines-Serna Villagran et al already taught the use of any commercially available potato (column 4, line 24), since Martines-Serna Villagran et al already used starch with a decreased amylose content (column 7, line 31), since the

Art Unit: 1761

100% high amylopectin potato starch of Tallberg et al has not been subjected to chemical modification, making it more suitable as a food ingredient (column 1, lines 37-44), since the 100% amylopectin potato of Tallberg et al naturally had a reduced amylose content, since the potato of Tallberg et al would have eliminated the need for blanching and pre-conditioning in Martines-Serna Villagran et al, and since the 100% amylopectin potato starch of Buwalda provides improved expansion properties in snack foods (page 13, column 3, paragraph 1).

9. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madines-Serna Villagran et al, in view of Tallberg et al and Buwalda, as applied above, and further in view of Jeffcoat et al [Pat. No. 6,541,060].

Martines-Serna Villagran et al, Buwalda, and Tallberg et al teach the above mentioned components. Martines-Serna Villagran et al, Buwalda, and Tallberg et al do not recite less than 10% pregelatinized waxy potato starch. Jeffcoat et al teach a food product comprising less than 10% pregelatinized waxy potato starch (column 13, Example 18). It would have been obvious to one of ordinary skill in the art to incorporate the less than 10% pregelatinized waxy potato starch of Jeffcoat et al into the invention of Martines-Serna Villagran et al, in view of Tallberg et al, since all are directed to food products, since Martines-Serna Villagran et al already included many different types of starches (column 10, lines 39-63), and since pregelatinized waxy potato starch was commonly used in food products, as shown by Jeffcoat et al (column 13, Example 18).

10. Claims 1-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable

Art Unit: 1761

over Martines-Serna Villagran et al in view of Stahl [Pat. No. 5,759,597] and Buwalda [Sheer Stability].

Madines-Serna Villagran et al teaches a snack product comprising potato flakes (column 10, lines 15-28), the potato flakes comprising 78% of the snack product (column 21, line 25), normal potato flakes comprising about 73-81% amylopectin (column 6, line 50); the preferred potato flakes having a decreased amylopectin content produced by blanching and pre-conditioning (column 7, line 31), cereal flours and normal potato starches (column 10, lines 40-63), additives such as emulsifiers (column 11, line 65), the snack products being fried, baked, or extruded (column 10, lines 15-28), Saturna variety of potatoes (column 4, line 28), less than 5% reducing sugars (column 11, line 50), and oil (column 17, line 30). Martines-Serna Villagran et al do not recite potato starch with an amylopectin content of at least 95% and at least 7% greater expansion (claim 1) or at least 85% amylopectin (claim 18). Applicant defined high amylopectin potato flakes and granules on page 4 of the specification as being potato flakes and granules prepared from potatoes of which the starch has an amylopectin content of 85% or more. Stahl teaches a food product comprising a potato with an amylopectin content of at least 95% (claims 1-2). Buwalda teach a potato with 100% amylopectin starch (Table 1) and improved expansion properties in snack foods (page 13, column 3, paragraph 1). It would have been obvious to one of ordinary skill in the art to incorporate the high amylopectin potato starch of Stahl and Buwalda into the invention of Martines-Serna Villagran et al since all are directed to food products, since Martines-Serna Villagran et al already taught the use of any commercially available

Art Unit: 1761

potato (column 4, line 24), since Martines-Serna Villagran et al already used starch with a reduced amylose content (column 7, line 31), since the 95% high amylopectin potato starch of Stahl has not been subjected to chemical modification, making it more suitable as a food ingredient, since the potato starch of Stahl was naturally low in amylase, since the potato of Stahl would have eliminated the need for blanching and pre-conditioning in Martines-Serna Villagran et al, and since the 100% amylopectin potato starch of Buwalda provides improved expansion properties in snack foods (page 13, column 3, paragraph 1).

11. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martines-Serna Villagran et al, in view of Stahl and Buwalda, as applied above, and further in view of Jeffcoat et al [Pat. No. 6,541,060].

Martines-Serna Villagran et al, Buwalda, and Stahl teach the above mentioned components. Martines-Serna Villagran et al, Buwalda, and Stahl do not recite less than 10% pregelatinized waxy potato starch. Jeffcoat et al teach a food product comprising less than 10% pregelatinized waxy potato starch (column 13, Example 18). It would have been obvious to one of ordinary skill in the art to incorporate the less than 10% pregelatinized waxy potato starch of Jeffcoat et al into the invention of Martines-Serna Villagran et al, in view of Buwalda and Stahl, since all are directed to food products, since Martines-Serna Villagran et al already included many different types of starches (column 10, lines 39-63), and since pregelatinized waxy potato starch was commonly used in food products, as shown by Jeffcoat et al (column 13, Example 18).

12. Claims 1-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable

Art Unit: 1761

over Martines-Serna Villagran et al in view of Buwalda [Sheer Stability].

Martines-Serna Villagran et al teaches a snack product comprising potato flakes (column 10, lines 15-28), normal potato flakes comprising about 73-81% amylopectin (column 6, line 50), the preferred potato flakes having a decreased amylose content produced by blanching and pre-conditioning (column 7, line 31), the potato flakes comprising 78% of the snack product (column 21, line 25), cereal flours and normal potato starches (column 10, lines 40-63), additives such as emulsifiers (column 11, line 65), the snack products being fried, baked, or extruded (column 10, lines 15-28), Saturna variety of potatoes (column 4, line 28), less than 5% reducing sugars (column 11, line 50), and oil (column 17, line 30). Martines-Serna Villagran et al do not recite potato starch with an amylopectin content of at least 95% and at least 7% greater expansion (claim 1) or at least 85% amylopectin (claim 18). Applicant defined high amylopectin potato flakes and granules on page 4 of the specification as being potato flakes and granules prepared from potatoes of which the starch has an amylopectin content of 85% or more. Buwalda teach a potato with 100% amylopectin starch (Table 1) improved expansion properties in snack foods (page 13, column 3, paragraph 1). It would have been obvious to one of ordinary skill in the art to incorporate the 100% amylopectin potato starch of Buwalda into the invention of Martines-Serna Villagran et al since both are directed to food products, since Martines-Serna Villagran et al already taught the use of any commercially available potato (column 4, line 24), since Martines-Serna Villagran et al already used starch with a decreased amylose content (column 7, line 31), since the 100% amylopectin potato starch of Buwalda provides improved

Art Unit: 1761

expansion properties in snack foods (page 13, column 3, paragraph 1), since the potato starch of Buwalda lacked amylose, and since the potato starch of Buwalda would have eliminated the need for blanching and pre-conditioning in Martines-Serna Villagran et al in order to increase the amylopectin content.

13. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martines-Serna Villagran et al, in view of Buwalda, as applied above, and further in view of Jeffcoat et al [Pat. No. 6,541,060].

Martines-Serna Villagran et al and Buwalda teach the above mentioned components. Martines-Serna Villagran et al and Buwalda do not recite less than 10% pregelatinized waxy potato starch. Jeffcoat et al teach a food product comprising less than 10% pregelatinized waxy potato starch (column 13, Example 18). It would have been obvious to one of ordinary skill in the art to incorporate the less than 10% pregelatinized waxy potato starch of Jeffcoat et al into the invention of Martines-Serna Villagran et al, in view of Buwalda, since all are directed to food products, since Martines-Serna Villagran et al already included many different types of starches (column 10, lines 39-63), and since pregelatinized waxy potato starch was commonly used in food products, as shown by Jeffcoat et al (column 13, Example 18).

Response to Arguments

14. Applicant's arguments filed 3/5/07 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually (in particular Martines-Serna Villagran et al), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Applicant argues that Tallberg et al and Stahl do not teach high amylopectin potato flakes or granules. However, Tallberg et al and Stahl both teach potatoes having 100% amylopectin starch content, and Martines-Serna Villagran et al teaches the use of any available potato to make the flakes and granules.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a complete lack of amylose) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

Art Unit: 1761

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Martines-Serna Villagran et al is directed to a snack food comprising potato flakes with reduced amylose content. Tallberg et al is directed to a type of potato without amylose. It would have been obvious to one of ordinary skill in the art to incorporate the amylose-free potato of Tallberg et al into the invention of Martines-Serna Villagran et al since both are directed to food products, since Martines-Serna Villagran et al already taught the use of any commercially available potato (column 4, line 24), since Martines-Serna Villagran et al already used starch with a reduced amylose content (column 7, line 31), since the 100% high amylopectin potato starch of Tallberg et al has not been subjected to chemical modification, making it more suitable as a food ingredient (column 1, lines 37-44), since the potato of Tallberg et al was amylose-free, and since the potato of Tallberg et al would have eliminated the need for blanching and pre-conditioning in Martines-Serna Villagran et al.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

Art Unit: 1761

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Martines-Serna Villagran et al is directed to a snack food comprising potato flakes with reduced amylose content. Stahl is directed to a type of potato with decreased levels of amylose. It would have been obvious to one of ordinary skill in the art to incorporate the reduced amylose potato of Stahl into the invention of Martines-Serna Villagran et al since both are directed to food products, since Martines-Serna Villagran et al already taught the use of any commercially available potato (column 4, line 24), since Martines-Serna Villagran et al already used starch with a reduced amylose content (column 7, line 31), since the reduced amylose potato of Stahl has not been subjected to chemical modification, making it more suitable as a food ingredient (column 1, lines 37-44), and since the potato of Stahl would have eliminated the need for blanching and pre-conditioning in Martines-Serna Villagran et al.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

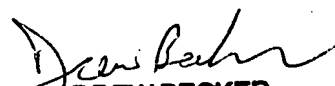
Art Unit: 1761

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E. Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Fri. 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DREW BECKER
PRIMARY EXAMINER

5-407